



City Research Online

City, University of London Institutional Repository

Citation: Rayment, J. (2013). Parents and children playing together: a research overview on the benefits of play for the development of children under two. *Perspective (Journal of the NCT)*(20), pp. 13-20.

This is the published version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: <https://openaccess.city.ac.uk/id/eprint/7947/>

Link to published version:

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Parents and children playing together: a research overview on the benefits of play for the development of children under two

By Juliet Rayment,
NCT social researcher

Parents are generally highly motivated to give their child the best start in life but many find it difficult to balance all the demands on their time. Mothers and fathers attend to their children's needs and interests, alongside looking after their own personal needs and those of their partner, and keeping in touch with friends and extended family members. There are many competing pressures – including economic pressures and career concerns – and it is easy for the focus on providing for the family in material and practical ways to crowd out the importance of shared relaxation, fun and play.

Parents may worry, too, about providing the 'right' kind of play opportunities for their children, with rising social expectations and pressures on parents to consciously give their child a good start.¹ Many practitioners and organisations work with parents of young children, providing support, information and guidance. NCT's aim in commissioning this piece of work was to provide an overview of evidence on play that would be of practical use to practitioners and organisations working with parents.

This overview of research on play defines what is understood by the concept of 'play' and summarises what psychologists have identified as its contribution to children's early cognitive and emotional development. It describes the theoretical background to what parents can

do to support their children's play, focusing on what is known about play in children under two years, including:

- How play develops during a baby's first year
- Play in the baby's second year, when the capacity for imagination develops
- The relationship between play and attachment
- The contributions that parents make when they engage with their children in play activities

The original plan was to review the academic research literature on the contribution of play to their development, focusing in particular on parent-child interactions and relationships, in typical children growing up at home with their family. We wanted to find out what is known about the contribution of parent-child play during the very early years on the long-term development of children.

After initial systematic searches on play in very young children, which identified very few studies, the scope of the article was broadened, and an exploratory, rather than systematic, method was adopted. This overview focuses on some of the key areas of the literature that are of most practical interest and utility for practitioners who work with parents of under-tuos. Some of the information may be of direct interest to parents and may be used for developing teaching materials and articles for them.

Background

Play is an ordinary, everyday activity for young children and something that parents and children often engage in together. Psychologists and psychotherapists have taken an interest in how different kinds of play behaviour might be associated with attachment and development^{2,3} and educationalists have been interested in children's opportunities to learn through play.⁴

In recent years there has been an increasing political and research interest in the home environment and interactions between parents and their children. Attention has been focused on a potential 'deficit' of appropriate engagement and stimulation for some children, such as those who live in poverty or poor housing, lack outdoor space to play,⁵ or whose parents are depressed.⁶ Policy recommendations have looked at improving play and development opportunities for young children, such as Sure Start Children's Centres.⁷

Successive governments have concentrated on the importance of the 'Foundation Years'^{8,9} and the long-term impact of disadvantage and limited play and learning

opportunities for very young children. The UK government's independent review on poverty and life chances, *The Foundation Years: preventing poor children becoming poor adults* concluded that 'positive parenting', which is defined as 'setting clear boundaries and routines for children as well as being responsive and warm towards the child'⁹ in the first few years of life could offset many of the negative effects of poverty on children's future chances.⁹

Others have criticised the way the governments have targeted parents, apparently blaming them for social problems, and focusing more on a deficit model and the need for corrective interventions rather than providing parents with support.¹⁰

Methodology

The original aims of this research overview were to explore the effects of play on the long-term development of children under the age of two. Butlins, which has funded the review, had a particular interest in water play and swimming, so systematic searches of the literature were carried out using the EBSCOhost, Web of Knowledge and Google Scholar databases on baby swimming and water play.

These used search terms such as 'infant AND swim*'; 'development AND swim*' and 'water play' and incorporated searches using the alternative terms for 'infant': 'child*', 'baby', 'babies', 'preschool*' and 'toddler*'. Most of the articles in the limited body of literature identified examined the effect of swimming on rates of asthma and ear infections. Only three studies were found on the impact of swimming on babies' development.^{11,12,13} Two of these were not in English and were reviewed by native speakers of Portuguese and French. None of the three studies were regarded as of a sufficiently high quality to be included in the overview. Following these initial searches, a search of the same databases was made that focused instead more broadly on play and child development, using terms such as 'parent* AND child* AND play OR interaction';

The NCT research overview series provides an evidence base to guide the practice of NCT and other transition to parenthood workers on topics of relevance during pregnancy, birth, parenthood and the care of babies and toddlers aged 0-2 years. Practitioners must decide how to apply the evidence in their practice but they can feel confident that the research overview provides an up-to-date, balanced and reliable summary and interpretation of the relevant research literature.

'parent-child AND play OR interaction'. The term 'parent*' was substituted with the alternative terms 'mother*' and 'father*' and the term 'child*' with the alternative terms 'infant*', 'baby', 'babies', 'preschool*' and 'toddler*'.

The original inclusion and exclusion criteria:

Inclusion criteria/focus of the search:

- Children under two years old
- Parent-child play (as opposed to peer play)
- Typically developing children
- Longitudinal studies looking at long-term outcomes

Exclusion criteria/focus of the search

- Children over two years old
- Children with atypical development or illness
- Children and families living in deprivation, or with neglect or abuse

As many of the searches generated a very high number of results (up to 16,000), selection was restricted to papers that had been peer reviewed, and published between 1992 and 2013 in social science journals. Articles from medical journals were mostly concerned with illness and disability and were excluded.

While there is a large and diverse body of work on child development and play, the searches uncovered very little on children aged under two, and in particular very little on any long-term outcomes associated with different experiences of play.

Rather, much of the psychological literature is based on small-scale observational studies of how parents and children play. In addition, most studies on children's play, and on children and adults playing together, focus on children aged 3-12 years and can be divided into two broad groups:

- Studies on parents or children with developmental impairments, health difficulties or social disadvantage
- Studies on childhood in the 21st century, where a key focus has been on cultural and environmental changes over time and particularly the effects for children older than two years

There were, for example, studies on parents with depression;^{14,15} children with autism, other learning difficulties or physical disability¹⁶ and children and parents living in poverty.¹⁷

The literature on childhood in the 21st century included studies on increased

perceptions of risk, and on the impact of new technologies. For example, one multi-method UK study examined parents' perceptions of the risk to children of, for instance, traffic or strangers and the restrictions that were placed on children's freedom to leave the house alone or play out in the street.¹⁸ They found that in response to worries about risk, most children's outdoor free play was taking place in private gardens and had been substituted by organised and supervised activities. Changes in technology have had an impact on parent-child interactions, including those with babies and children aged under two, and some implications of this important element of 21st century family life are discussed in more detail later in the review.

It is significant that the body of research on parent-child relationships and play at any age is dominated by evidence on the mother-child relationship. Research on fathers focuses on activities that are perceived as being within the domain of fathering, such as physical rough and tumble play.^{19,20} This imbalance of evidence is reflected in this review, which largely draws on evidence relating to mothers and their children.

After searching the academic databases, searches were then made of relevant books, reviews and reports. The reference lists of the books and a series of reviews by Play England were manually sifted. Searching for books generated more targeted information than the academic databases; however, the literature in the Play England reports was found to relate mostly to outdoor play and to play in children over the age of two.^{21,22,23}

As the aim was to provide an overview that would inform NCT practitioners and professionals working with families during the transition to parenthood, in light of the limited number of research articles that met the original inclusion criteria, it was decided that the article would be broadened, taking more of a pragmatic and realistic approach. The brief was adapted to include:

- Observational studies
- Studies that were not longitudinal or addressing long-term outcomes
- Selected studies relating to preschool-aged children over two years old

All articles and books reporting primary research were evaluated for quality and reliability by ensuring that they had:

- A clear statement of aims
- An appropriate methodology
- A clearly described method
- Appropriate recruitment and sample
- A consideration of confounding factors (in observational studies)
- Clearly stated conclusions

The literature on child development is extensive; this article does not attempt to cover it all.

A definition of play

Experts in play continue to struggle with how best to define it. Anthropologists of play have found a great diversity across the world in attitudes about the importance of play, what makes good play and the extent to which parents play with their children.²⁴ This makes it difficult to find a universal definition. The diversity of norms and values in relation to play is reflected in other cultural practices of childrearing such as, for example, baby-wearing²⁵ and co-sleeping.²⁶ A review of studies looking at attitudes towards play in different countries found that while parents in the global north encourage play and expect to play with their children, playing with a child is far less common in some developing countries.^{27,28}

'Play can be defined as activities which are flexible, fun, done voluntarily, for their own sake and not to achieve anything.'

There are a number of definitions of play that include different types of play and play with and without toys. Krasnor and Pepler defined play as including activities which are flexible, fun, done voluntarily, for their own sake and not to achieve anything, and is often non-literal so that actions done in play represent a related but not identical action in real life.²⁹ To explain non-literal actions, Bateson gave the example of a pretend nip during playing.³⁰ The nip represents a real-life bite, but does not display the aggression that a real bite would.³⁰ Children under about 18 months old cannot distinguish between real and pretend worlds, but play with parents may still involve these 'non-literal' actions, such as a parent pretending to eat a baby's foot.

The National Institute for Play provides a wider definition that describes seven play 'patterns' or types for both child and adult play. One episode of play may include a number of these elements:

1. **Attunement:** play establishing a connection between a parent and child
2. **Body:** when a child explores its own movement
3. **Object:** play involving toys or any other objects
4. **Social:** play involving others in a way that builds connections with other children, including wrestling or rough and tumble play
5. **Imaginative:** pretend or fantasy play
6. **Narrative:** storytelling or retelling a read story in their own words
7. **Transformative:** play that is experimental, that uses something in a new way or discovers new knowledge

Further details and references on each of these types of play can be found at http://www.nifplay.org/states_play.html.

Babies and toddlers need secure attachment to be able to move on easily to exploration and experimentation

A secure attachment to a primary caregiver is crucial for babies' emotional wellbeing, and attachment affects cognitive, social and physical development during the first few years of life. Establishing a secure attachment during the first two years can be seen as underpinning other aspects of development.³¹ Many parent-child interactions and activities serve to reinforce a child's security of attachment or can be strained or limited and lead to more insecure, ambivalent or avoidant attachment.^{2,32} Parent-child play is both affected by the kind of attachment a baby has and the way parents interact and play with their child, and is fundamental to the quality of the relationship they share.

Secure attachment helps support play both between parents and children and also between peers. When Ainsworth first carried out the 'strange situation' experiments, in which mothers and one-year-old babies were briefly separated and then reunited, one way in which she measured attachment was by recording how quickly the babies resumed exploring their environment and playing after being reunited.² The majority of babies were securely attached and quickly recovered from the separation, resuming exploration and play. Her work, and the work of John Bowlby, who first proposed the theory of attachment, concluded that secure attachment with a parent or care-giver provided a 'safe haven' or base from which babies could explore and make independent relationships with others.³³

Studies of children who have not had the opportunity to develop such an attachment have shown that this can lead to significant emotional and psychological problems that can cause long-term difficulties in forming



close relationships, and have an impact on learning and education.³⁴

In the first months, babies often show their interest in an object or an activity by directing or averting their gaze to regulate their own levels of stimulation, showing signs of interest and pleasure, or even by crying.³⁵ Parents who are responsive to their child's cues, including during play, will be able to help them avoid becoming bored or over-stimulated. This helps develop children's abilities to regulate their own feelings and to self-soothe as they get older.³⁶

Play may be spontaneous and easy for some parents, but others find it more difficult. Postnatal depression can have an adverse effect on both mother-child and peer play. Mothers who have had postnatal depression generally have more difficulty responding to their infants' needs during everyday care and interaction, and in relation to play activities.⁶ The impact of this can be lasting. For example, Hipwell and Murray found that five-year olds of mothers who had previously had postnatal depression were more likely to be aggressive during play with their peers.³⁷ In this study, as has frequently been found, postnatal depression was associated with conflict between the parents, and children's play as five year olds may therefore have been affected as much by the couple conflict as by the maternal depression.³⁷

In another study by the same authors, children of mothers who had been postnatally depressed were less mutually responsive to their peers in the playground and showed play that was less free and 'creative' in the classroom setting than the children of non-depressed mothers. These effects were independent of marital conflict.³⁸

There are no large-scale, population-based studies on parent-child play and related interaction in children under two. However, two key studies have shown that the amount of time that parents play with their older children varies.³⁹ The Effective Provision of Pre-School Education (EPPE) cohort study involved families with children aged 3-4 years old. It concluded that the quality of the 'home learning environment', which included the amount of time parents spent with their child doing things like reading to them, playing with letters, numbers, shapes or singing, had a greater impact on children's cognitive development than their mother's qualifications or socio-economic status.

Analysis of data from 14,034 participant families in the Millennium Cohort Study, when children were aged five found some evidence that adults from lower socio-economic groups spend less time both playing and reading with their children than those from higher socio-economic groups, although the correlation was not strong.³⁹ However, younger parents (aged 14-24 at the time of birth) were more likely to play with their children every day than those mothers who were 35 or over when they had their baby.³⁹

The development of play in the first two years

Understanding their agency - how development during the first year is necessary for babies to play

The first two years of a child's life are a period of intense physical, cognitive and social development.⁴⁰ By the age of two, children with typical development have many skills that they can use during play: an increasing understanding that they are a separate individual from other people; interest in



playing with others; increased independence and less anxiety when away from parents; and the ability to walk, run and climb with confidence. As children's capacities change and develop over the years of early childhood, so does their play.

Much of the research on play in young children is observational and theoretical. It sets out to describe and make sense of normal behaviour, and the part it plays in the developmental process. Jean Piaget⁴¹ described the play of very young infants, under six months, as 'sensorimotor' or 'practice' play and as babies learn new actions (e.g. sucking, grasping, waving arms, kicking), they repeat these new-found skills because of the pleasure of the movement.⁴² In the first year of life, play helps children to discover their own bodies as much as the world around them.

As they get older, infants under one begin to understand the effects their movement has on other objects. For example they may discover that shaking a rattle makes a noise or kicking hard shakes the cot. In their first few months, babies start to be able to pick up toys and objects and voluntarily move them in front of their eyes, into their mouth or to a different place. Playing with the movement of their body, with objects, and with parents, helps them to discover and then practise these skills. This kind of play helps develop their understanding of

their agency, that is, their ability to make an impact on the world around them. There are many informative and accessible books on early child development that describe this, now well-established, idea of agency, for example *Introduction to Infant Development*,⁴³ especially Chapter 4 on motor development.⁴⁴ Jean Piaget called agency the 'engine' of development and it is understood that it provides a crucial foundation for the psychological advances that happen during childhood.⁴⁵

'Play not only helps babies to discover their physical limits, it also helps them to develop their social and emotional skills.'

As children get older their capacity to play alongside and with others increases. After the age of about eight months, babies begin to look at or interact with an object together with someone else, usually a parent or caregiver. This 'joint attention' helps babies and very young children learn that others can have the same experiences with objects as they have; that others have experiences and desires similar to theirs and that *they* can influence others' interactions with objects by following or directing the other person.⁴⁶

The joint attention involved in parent-child play has been found to promote babies' development, especially their language.⁴⁷

Play in the second year: let's pretend

During their second year, children become increasingly interested in pretend or 'symbolic' play. This pretend play develops as children learn the difference between the real and imaginary worlds. At the start, this pretend play mostly means using pretend objects to stand in for real ones that resemble them – for example using a toy phone with buttons and a receiver to 'call' someone. As they get older, children are able to pretend with items that are less and less like the original object, for example, using a banana or a stick as a phone and then eventually any item such as a block or a different kind of toy.⁴¹

Participation in pretend play also changes and becomes more sophisticated: from the child playing with an object, to the child using an object on, or with, another person – handing the pretend phone to a parent to join the conversation. By the end of their second year, children are able to use a sophisticated array of pretend items and actions initiated by pretend participants in their imagination. This may involve games such as setting up a tea party for imaginary friends or eating imaginary food.⁴⁸ Pretend play between parents and children

gives children an opportunity to play out and practise different social situations. In many cases these will be familiar rituals, such as dinner time or going to bed. At other times, children may use pretend play to practise conversations and relationships, including resolving conflict, and generally understand others' experience better. Research on 'rough and tumble' play suggests that when this kind of play is contained by parents it helps children to manage aggression.⁴⁹ There has been no identified research exclusively about under twos, however an observational study of father-child physical play in children aged 2-6 found that such play helped to contain children's aggression if the father remained dominant in the rough and tumble play.²⁰

Opportunities to practise real-life scenarios and express themselves physically are important for children's development and learning. They help babies to discover their physical capacities and limits, and to develop social and emotional skills.

Exposure to television can impede parent-child interactions

In recent decades, the rapid increase in the use of media technologies in the home has brought a change in how much very young children are exposed to television and the internet. There is very little evidence on the

effects of television and other electronic media on babies and children under two and there is a need for further research and high quality evidence in this area.

One non-systematic review of young children's exposure to television highlighted the lack of existing research and concluded that there was insufficient evidence on the benefits or harm of TV on very young children.⁵⁰ This review makes a useful distinction between infants watching shows that are produced and screened for very young children, 'foreground television', and 'background television', when the television is screening content not produced for young children and without the expectation that they will pay attention to it. The authors cautioned against recommending no screen time at all for children under two, and against allowing them to watch it for long periods of time. Watching targeted programmes for young children with a parent and talking about the content together might mitigate some of the potential adverse effects, such as less interaction with an adult and fewer opportunities for development of language.

Studies suggest that under two years of age, children do not have the cognitive skills to understand the content or learn from television as much as they do from real-life encounters. For this reason, the American

Academy of Pediatrics holds a policy that officially 'discourages' media use in children of this age group.⁵¹ There is no similar policy from UK professional bodies or government. A number of studies of slightly older children found that background television results in poorer quality parent-toddler interaction than when no television is on. For example, Kirkorian measured the interactions of 51 parents and their 2-3 year old children for half an hour with a television on in the background and half an hour with it off. They found that the quantity and quality of parent-child interactions decreased with the TV on and suggested that this passive exposure to TV may have an adverse effect on children's early development.⁵²

Parents normally help their young children by providing structure

Vandell and Wilson carried out observational studies of mothers and their young children to explore how parents supported their children's play. They found that 'through their attention and choice of behaviours, mothers (or others) are seen as providing a framework around which they and their infants interact'.⁵³ They refer to this as mothers providing 'scaffolding' for their children and explored this by comparing mother-child interactions with child-child interactions. They observed the play of 26 second-born infants when they were 6.5 months old and

Ways that parents can enhance their children's play

Many parents play with their young children spontaneously and unselfconsciously, in a sensitive and supportive way. Some are interested to learn about the theory of child behaviour, such as theory about children's cues and different states⁶⁰ or levels of arousal at different times.

Some may benefit from developing their understanding of babies' needs and behaviour, and are able with support to become more attuned and sensitive, or more engaged and responsive.^{61,62}

The following summary of skills used in parent-child interactions during play is taken from Fergus Hughes.⁴⁸

The list is not exhaustive, and others would explore these interactions using different language,^{63,64} but it indicates some of the ways that parents can, and do, provide a rich repertoire of appropriate, playful care for young children.

Being sensitive to children's cues involves:

- Being able to correctly assess a child's intentions and abilities
- Correctly reading a child's responses
- Knowing how and when a child needs direction and an adult should intervene
- Simply imitating the child's behaviour and then expanding on it

Maintaining a playful and available attitude involves:

- Showing an enthusiastic approach to play
- Smiling and laughing during play
- Making frequent eye contact
- Talking to their baby, i.e. using 'infant-directed' speech
- Making playful facial gestures

Making an effort to keep children at an optimal arousal level involves:

- Keeping a child from being bored or overly excited
- Offering a new toy when a child is tiring of the current one
- Initiating rousing physical play

- Calming and soothing an overly excited child by reducing the intensity of play and simply holding and caressing the child

Being willing to engage in social games with infants and toddlers by:

- Playing games, such as peek-a-boo, that involve sharing, playing complementary roles, and taking turns

Source: Children, play and development. 4th edition, Fergus Hughes.⁴⁸

Experimentation and repetition of experiences are helpful for children in learning to figure out the world. However, for parents and other caregivers, particularly those who are stressed, isolated or unsupported by other adults, simple repetitive activities can easily become boring and frustrating.

again at 9.5 months. Each of these babies had a 3-6 year old sibling.⁵³ They videoed the babies playing first with their mothers, then with their siblings and then with another baby of the same age. In each of the babies' encounters they counted the number of times their play partner encouraged or 'scaffolded' their play through taking turns, suggesting activities and social interactions. For example, they found that mothers demonstrated 'peekaboo' until infants actively took part in the game themselves. Their findings showed that infants spent much less time taking turns and having these sort of encouraging and supportive interactions with their peers and siblings than they did with their mothers, suggesting that play with an adult enhanced learning. Interestingly, those children who experienced more sophisticated interactions with their mothers also had more sophisticated interactions with both their siblings and peers, suggesting that mothers who more frequently 'scaffolded' their child's play also provided 'opportunities for the infant to develop more active social interaction skills' with others.⁵³

This supported or 'scaffolded' play helps children to develop their relationships with their peers as they get older by developing skills such as taking turns and, through this, their language and communication. Taking turns helps babies and very young children to learn about how language is used socially in conversation as well as how to cooperate in more practical or physical activities. Gardner⁵⁴ and Pettit & Bates⁵⁵ found that when parents take proactive steps to keep play going this is an important and effective parenting process and seems to help prevent conduct problems in children later in childhood.

The literature suggests that there are differences in how play is directed depending on the gender of the parent and the child. This has not been explored systematically in this overview, but it is noted as an important component of this area of knowledge, which should not be overlooked. Thomas Power's research on the play interactions between mothers and infants and fathers and infants found that fathers were more likely to direct play than mothers, and parents were also more likely to direct their daughters' play than their sons'.⁵⁶ Similarly, other evidence shows that parents may be more sensitive to the facial expressions of baby girls⁵⁷ and play differently with them, for example because they tend to underestimate girls' physical abilities relative to boys'.⁵⁸

Supporting or directing

Parents have a positive influence on their children's play by providing a framework and

being responsive to their child, but direction is unhelpful if it becomes rigid, intrusive or controlling. Fein and Fryer reviewed research on parent-child play and found that different sorts of maternal behaviour had a range of positive and negative effects. Their review was not systematic and they found few high-quality studies in this area, particularly studies looking long-term effects. However, their synthesis of four key studies of children aged between 13 and 38 months showed that 'mothers who offer direct suggestions, solicit pretend behaviours from their children and participate in pretend exchanges have a positive influence on their children's play', in particular that the play lasts longer and involves more sophisticated interactions with pretend objects. In contrast, 'Mothers who are distant or indirect have little influence on their children; (and) mothers who are intrusive and tutorial have a negative influence'.⁵⁹ When parents are able to provide appropriate support and structure, therefore, this contributes to their children's social development.

Conclusions

Most new parents communicate with their baby through playful interactions³⁵ and play is a part of their everyday life. Parents do not need a lot of space or financial resources to provide a secure and stimulating environment for their children. As the authors of the EPPE study concluded: 'What parents do is more important than who parents are'.⁶⁵

This kind of day-to-day play has a significant influence on parent-child relationships; parent-child attachment and bonding also affects the quality of interactions and play. For children under two, the connection between play and relationships is particularly strong because this is the time when children are developing their primary attachment relationships. A secure attachment to a parent or other primary carer gives children a 'safe haven' from which to explore the world, to play, to learn and to retreat to when they need comfort and help. When parents respond to their children's cues during play, for example, when they react to signs of boredom or overstimulation, they help to teach their children to manage their feelings and soothe themselves. Most children will develop this attachment without problem and most parents will easily integrate play into many aspects of their daily lives, continuing to play with their children well beyond the first two years. Others may find play more challenging for a number of reasons, including postnatal depression.

Babies' physical play, for example waving and kicking, and their play with toys, as well as with their parents, causes them to realise they have an influence on the world and this understanding of agency acts as a foundation

for their continuing development. When parents engage in play with children, play that involves cooperation, taking turns, and supporting or scaffolding the play, they are modelling positive behaviour not only for the play relationship, but for many other aspects of life.

This overview has been produced over a six-month time period on a part-time basis and has been limited in depth and scope for these reasons. The original studies were not reviewed for quality and relevance by more than one researcher. However, six peer reviewers commented on the first draft (four academic psychologists, and two NCT postnatal leaders), and their knowledge of the literature and expertise was invaluable in helping to shape the text. Many known, and potential, influences on parent-child play were beyond the scope of the overview, even though the scope was extended to ensure that it was of practical use for practitioners and organisations working with the families of very young children. For example, it was not possible within the time and space constraints to search for literature on parents' own experiences of being parented, or on the different temperaments of babies. Nor was it possible to explore the impact of gender or ethnicity in detail.

No large, population-based, longitudinal research studies were found on families with a child under two years focusing in detail on play and development. Most studies of parent-child interactions and play are observational, and have tended to be small-scale as this kind of research is labour-intensive and expensive to run.

There is considerable scope for more research on families with children aged from birth to two years, to explore similarities and differences in relation to parents' own parenting, education and background, their age, gender, health and socio-cultural differences. Studies that have developed theory on the role of mother-child play in child development, such as responsiveness to babies' cues or scaffolding, would benefit from replication using larger samples, and with specific groups of parents including fathers and mothers from different social class, educational and ethnic groups. More studies on how mothers and fathers interact with babies of different gender and the long-term effects of early interactions and play would also be valuable. We also need to know more about the changing social context of parenting and in particular how mothers and fathers feel about their caring roles, the pressures they experience, the kinds of family and neighbourhood support they can access, and the kinds of resources and services they find supportive or undermining.



Summary points

- **Playing with movement, with toys, and with parents, helps very young babies to discover their agency, a crucial foundation for their psychological development.**
- **Children may use play to practise conversations and relationships, including resolving conflict.**
- **Taking turns helps babies and very young children to learn about how language is used socially in conversation as well as how to cooperate in more practical or physical activities.**
- **Parents can provide support by demonstrating, guiding and taking turns during play activities.**
- **When parents 'scaffold' children's play responsively this can help children make the most of its social and developmental benefits.**
- **Parents who are aware of their babies' and toddlers' cues can help their child develop, learn to regulate their own feelings and to self-soothe as they get older.**
- **There is some evidence that the quantity and quality of parent-child interactions decrease when the television is on, and that a high level of exposure to television may have an adverse effect on children's early development.**
- **No large, population-based, longitudinal research studies were found on families with a child under two years focusing in detail on play and development. More research is needed on the everyday interactions and experiences of ordinary families with very young children, how mothers and fathers feel about their caring roles, the pressures and support they can access, and the long-term impact of children growing up of differences during their start in life.**
- **The large-scale, longitudinal Effective Provision of Pre-School Education (EPPE) cohort study which first had contact with children aged 3-4 years, found that the quality of the 'home learning environment', which included parents reading and playing with letters, numbers, shapes or singing with their child, had a greater impact on children's cognitive development than their mother's qualifications or socio-economic status.**

Mary Newburn, NCT's head of research and quality, commissioned and edited this overview. The author and editor are grateful to the six peer reviewers (four academic and two NCT practitioners) who contributed constructive criticism and ideas.

References

1. Wall G. Mothers' experiences with intensive parenting and brain development discourse. *Women's Studies Int Forum* 2010;33(3):253-63.
2. Ainsworth MD, Blehar MC, Waters E et al. *Patterns of attachment: a psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum; 1978.
3. Baron-Cohen S. Autism and symbolic play. *Brit J Dev Psychol* 1987;5(2):139-48.
4. Sylva K, Melhuish E, Sammons P, et al. *The Effective Provision of Pre-School Education (EPPE) project: findings from the early primary years*. Sure Start; 2004. Available from: <http://www.education.gov.uk/childrenandyoungpeople/earlylearningandchildcare/evidence/a0068162/effective-provision-of-pre-school-education-eppe>
5. Grigsby-Toussaint DS, Chi SH, Fiese BH. Where they live, how they play: neighbourhood greenness and outdoor physical activity among preschoolers. *Int J Health Geogr* 2011;10:doi: 10.1186/1476-072X-10-66.
6. Murray L, Fiori-Cowley A, Hooper R, et al. The impact of postnatal depression and associated adversity on early mother-infant interactions and later infant outcome. *Child Dev* 1996;67(5):2512-26.
7. Glass N. Sure Start: the development of an early intervention programme for young children in the United Kingdom. *Child Soc* 1999;13(4):257-64.
8. Allen G. *Early intervention: the next steps*. London: The Early Intervention Review Team; 2011. Available from: <http://dwp.gov.uk/docs/early-intervention-next-steps.pdf>
9. Field F. *The foundation years: preventing poor children becoming poor adults. The report of the Independent Review on Poverty and Life Chances*. London: Independent Review on Poverty and Life Chances; 2010. Available from: http://povertyreview.independent.gov.uk/final_report.aspx
10. Featherston B, Morris K, White S. A marriage made in hell: early intervention meets child protection. *Brit J Soc* 2013;doi:10.1093/bjsw/bct052.
11. Sigmundsson H, Hopkins B. Baby swimming: exploring the effects of early intervention on subsequent motor abilities. *Hlth in Child Car Hlth Dev* 2010;36(3):428-30.
12. Silva JO, Martins JC, Morais RL, et al. Influence of aquatic stimulation on 0 to 18-month child development: a pilot study. *Fisioterapia e Pesquisa* 2009;16(4):335-40.
13. Moulin JP. Bébés-nageurs: effets des séances de piscine sur le développement du jeune enfant. *Journal de Pédiatrie & de Puériculture* 2007;20(1):25-8.
14. Lovejoy MC, Graczyk PA, O'Hare E, et al. Maternal depression and parenting behaviour: a meta-analytic review. *Clin Psychol Rev* 2000;20(5):561-92.
15. Edhborg M, Lundh W, Seimyr L, et al. The long-term impact of postnatal depressed mood on mother-child interaction: a preliminary study. *J Reprod Infant Psychol* 2001;19(1):61-71.
16. El-Ghoroury NH, Romanczyk RG. Play interactions of family members towards children with autism. *J Autism Dev Disord*. 1999;29(3):249-58.
17. Milteer RM, Ginsburg KR, Council on Communications and Media, et al. The importance of play in promoting healthy child development and maintaining strong parent-child bond: focus on children in poverty. *Pediatrics* 2012;129(1):e204-e213.
18. Valentine G, McKendrick J. Children's outdoor play: exploring parental concerns about children's safety and the changing nature of childhood. *Geoforum* 1997;28(2):219-35.
19. Paquette D, Carbonneau R, Dubeau D, et al. Prevalence of father-child rough-and-tumble play and physical aggression in preschool children. *Eur J Psychol Educ* 2003;18(2):171-89.

20. Flanders JL, Leo V, Paquette D, et al. Rough-and-tumble play and the regulation of aggression: an observational study of father-child play dyads. *Aggr Behav*. 2009;35(4):285-95.
21. Gleave J, Cole-Hamilton I. *A world without play - a literature review*. London: Play England; 2012.
22. Lester S, Russell W. *Play for a change: play, policy and practice: a review of contemporary perspectives*. London: Play England; 2008.
23. Gleave J. *Children's time to play: a literature review*. London: Play England; 2009.
24. Schwartzman HB. The anthropological study of children's play. *Annu Rev Anthropol* 1976;5:289-328.
25. Glover R. Research overview: is there evidence to support the use of soft slings? *Perspective* 2012;(16):18-20.
26. Ball H. Bed-sharing and co-sleeping. *New Digest* 2009;(48):22-7.
27. Roopnarine JL. Cultural variations in beliefs about play, parent-child play, and children's play: meaning for childhood development. In: Pellegrini AD, editor. *The Oxford handbook of the development of play*. Oxford: Oxford University Press; 2011. pp. 19-37
28. Roopnarine JL, Krishnakumar A. Parent-child and child-child play in diverse cultural contexts. In: Pronin Fromberg D, Bergen D, editors. *Play from birth to twelve: contexts, perspectives, and meanings. 2nd edition*. New York: Routledge; 2006. pp. 275-88
29. Krasnor LR, Pepler DJ. The study of children's play: some suggested future directions. *New Dir Child Adolesc Dev* 1980;(9):85-95.
30. Bateson G. *Steps to an ecology of mind: collected essays in anthropology, psychiatry, evolution and epistemology*. 2nd edition Chicago, IL: University of Chicago Press; 1999.
31. Brownell CA, Brown E. Peers and play in infants and toddlers. In: Van Hasselt VB, Hersen M, editors. *Handbook of social development: a lifespan perspective*. New York: Plenum Press; 1992. pp. 183-200
32. Meier R. The development of secure attachment in babies and young children: a review of research. *New Digest* 2008;(41):23-6.
33. Bowlby J. *A secure base: clinical applications of attachment theory*. London: Routledge Classics; 2005.
34. Roisman GI, Groh A M. Attachment theory and research in developmental psychology: an overview and appreciative critique. In: Underwood MK, Rosen LH, editors. *Social development: relationships in infancy, childhood, and adolescence*. New York: Guilford Press; 2011. pp. 101-26
35. Murray L, Andrews L. *The social baby*. Richmond: CP Publishing; 2000.
36. Bornstein MH, Tamis-LeMonda C S. Infants at play: development, functions and partners. In: Slater A, Lewis M, editors. *Introduction to infant development*. Oxford: Oxford University Press; 2007. pp. 253-69
37. Hipwell AE, Murray L, Ducournau P, et al. The effects of maternal depression and parental conflict on children's peer play. *Child Care Hlth Dev*. 2005;31(1):11-23.
38. Murray L, Sinclair D, Cooper P, et al. The socioemotional development of 5-year-old children of postnatally depressed mothers. *J Child Psychol Psyc* 1999;40(8):1259-71.
39. Brocklebank RL, Bedford H, Griffiths L. Social determinants of parent-child interaction in the UK. *Arch Dis Child* 2011;96(Suppl 1):A7-A10.
40. Shonkoff JP, Phillips DA editors. *From neurons to neighborhoods. The science of early childhood development*. Washington, DC: National Academy Press; 2000.
41. Piaget J. *Play, dreams and imitation in childhood*. London: Routledge & Kegan Paul; 1962.
42. Pellegrini AD, Smith PK. Physical activity play: the nature and function of a neglected aspect of playing. *Child Dev* 1998;69(3):577-98.
43. Slater A, Lewis M editors. *Introduction to infant development*. 2nd edition Oxford: Oxford University Press; 2007.
44. Adolf KE, Joh A S. Motor development: how infants get into the act. In: Slater A, Lewis M, editors. *Introduction to infant development*. Oxford: Oxford University Press; 2007. pp. 63-80
45. Piaget J. *Structuralism*. New York: Harper & Row; 1970.
46. Bigelow AE, MacLean K, Proctor J. The role of joint attention in the development of infants' play with objects. *Dev Sci* 2004;7(5):518-26.
47. Morales M, Mundy P, Delgado CE, et al. Responding to joint attention across the 6-through 24-month age period and early language acquisition. *J Appl Dev Psychol* 2000;21(3):283-98.
48. Hughes FP. *Children, play and development*. 4th edition Thousand Oaks: Sage; 2010.
49. Scott E, Panksepp J. Rough-and-tumble play in human children. *Aggr Behav* 2003;29(6):539-51.
50. Anderson DR, Pempek TA. Television and very young children. *Am Behav Sci* 2005;48(5):505-22.
51. Council on Communications and Media. Media use by children younger than 2 years. *Pediatrics* 2011;128(5):1040-5.
52. Kirkorian HL, Pempek TA, Murphy LA, et al. The impact of background television on parent-child interaction. *Child Dev* 2009;80(5):1350-9.
53. Vandell DL, Wilson KS. Infants' interactions with mother, sibling, and peer: contrasts and relations between interaction systems. *Child Dev* 1987;58(1):176-86.
54. Gardner FE. The quality of joint activity between mothers and their children with behaviour problems. *J Child Psychol Psych* 1994;55(5):935-48.
55. Pettit GS, Bates JE. Family interaction patterns and children's behaviour problems from infancy to 4 years. *Dev Psychol* 1989;25(3):413-20.
56. Power TG. Mother-and father-infant play : a developmental analysis. *Child Dev* 1985;56(6):1514-24.
57. Fine C. *Delusions of gender: the real science behind sex differences*. London: Icon Books; 2010.
58. Mondschein ER, Adolph KE, Tamis-LeMonda CS. Gender bias in mothers' expectations about infant crawling. *J Exp Child Psychol* 2000;77(4):304-16.
59. Fein GG, Fryer MG. Maternal contributions to early symbolic play competence. *Dev Rev* 1995;15(4):367-81.
60. Brazelton TB, Cramer BG. *The earliest relationship: parents, infants and the drama of early attachment*. USA: Da Capo Press; 1990.
61. Cudmore L. Supporting young parents with complex needs. *Perspective* 2012;(17):4-5.
62. Emanuel L. The emotional life of the toddler: developing an identity through talk and play. *Perspective* 2012;(14):6-7.
63. Tronick E, Beeghly M. Infants' meaning-making and the development of mental health problems. *Am Psychol* 2011;66(2):107-19.
64. Tronick E, Cohn J, Shea E. The transfer of affect between mothers and infants. In: Brazelton TB, Yogman MW, editors. *Affective development in infancy*. Norwood, New Jersey: Ablex; 1986. pp. 11-25
65. Melhuish E, Sylva K, Sammons P et al. *Technical Paper 7 - The Effective Provision of Pre-School Education (EPPE) project: social/behavioural and cognitive development at 3-4 years in relation to family background*. London: DfEE/Institute of Education, University of London; 2001. Available from: <http://eppe.ioe.ac.uk/eppe/eppepubs.htm>

NEXT ISSUE:

Supporting Breastfeeding

Subscribe now so you don't miss out.

This NCT journal is designed for all those practitioners preparing parents for birth and early parenthood. If you work in a children's centre or the NHS and have been sent a free trial copy you can take out a subscription at:

**www.nctprofessional.co.uk
item number 4761**

Perspective is sent to all NCT practitioners and maternity services reps, and is also accessible online for all NCT volunteers.